

REMARKS/ARGUMENTS

Claims 1-11 and 13-17 are active.

Claims 1 and 2 have been amended to incorporate Claim 12

Claim 6 is amended as suggested at page 2 of the Action. Thus, the objection to this claim can be withdrawn.

Claim 14 is amended to incorporate the apparatus definitions from Claim 1. Thus, the rejection under 35 USC 112, second paragraph can be withdrawn.

The specification is amended to insert a section to cross-reference the applications to which benefit is claimed.

No new matter is added.

The Examiner's obviousness rejections center on the combination of U.S. 2001/0053537 to Conlan and US 5,080,770 to Culkin (see the Official Action on pages 3-4). In the rejections, the Examiner finds that Conlan's arrangement in FIG. 8 meets the limitations of the claimed apparatus. In particular, note that the Examiner equates the separation membrane 13, which can be made from polyacrylamide, the same as the gel retaining layer 5 of the present application. The Examiner relies on Culkin only for the suggestion to include inlet and outlet openings (see page 4, 1<sup>st</sup> paragraph). On pages 4-5 of the Official Action the Examiner adds Tarnopolsky and Landers to Conlan and Culkin for teachings for the buffer inlet and outlets functioning as electrodes. On pages 8 and 9, the Examiner combines Lijstrand or Jones to Conlan and Culkin to allege that the inclusion of a waveform generator and coordination controller as well as the porous support for the gel would have been obvious.

The rejections applied against Claims 1, 3-8 and 14-17 citing Conlan and Culkin, against Claims 2-8 and 14-17 citing Tarnopolsky, Landers, Conlan and Culkin; and against

claims 9-11 citing Conlan and Culkin and Ligestrand can be withdrawn because it is admitted in the rejections that these references taken individually or combined fail to teach an electrophoresis apparatus further defining the gel retaining layer as in Claim 12 (which has been incorporated into Claims 1, 2 and 14).

While the Examiner has included Claim 12 in the rejection as obvious with Conlan, Culkin and Jones, Applicants find the Examiner's rejection and reasons supporting the rejection to lack merit. That is, the Examiner has misinterpreted Claim 12 as simply a mat or mesh that can include the layer of gel formed thereon and the biological material contained in that gel (see the Official Action at page 9).

While Applicants understand that, during the prosecution of an application in the Office, claims are to be given their broadest reasonable interpretation consistent with the teaching in the specification (*In re Bond*, 710 F.2d 831, 833 (Fed. Cir. 1990)), it is error to disregard express limitations in the claims. The Examiner may not set up a "strawman" claim and reject it rather than subject matter encompassed by the actual claims.

The plain language of Applicants' claims requires: "the gel retaining layer is a gel material held in one or more through-holes provided in a porous plate, a biological material being bound to this gel material." The present application provides clear description on the configuration of the gel retaining layer (see, e.g., FIGs. 3 and 8).

Clearly the structure of a gel held in through holes is not the same as a gel being placed on a matt as described by Jones. Further, as Conlan, clearly states that the separation portion of his device is a membrane, Applicants cannot agree that one would have ignored Conlan's teachings and replaced that membrane as the Examiner has alleged. Further, even assuming that the rejection was proper and established a *prima facie* case of obviousness, the comparative data presented in the Examples show that preparing the gel retaining layer is

important (see comparative example 1) and the inclusion of a buffer storage and semi-permeable membrane are important (see comparative example 2) to achieve improved results.

Reconsideration and withdrawal of the rejection is requested.

A Notice of Allowance is also requested.

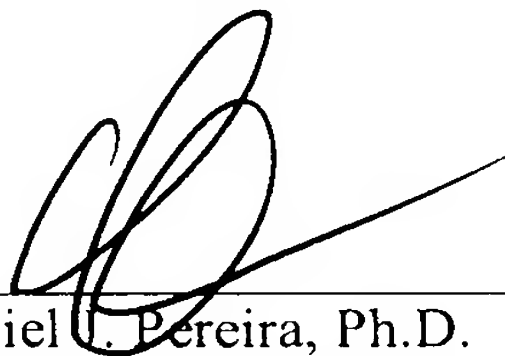
Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, L.L.P.

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/09)

A handwritten signature in black ink, appearing to read 'Daniel U. Pereira', is written over a horizontal line.

Daniel U. Pereira, Ph.D.  
Registration No. 45,518